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IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

Claims 1-17 (canceled).

18. (currently amended) A system comprising:

a base station;

a plurality of terminals; and

a reservation channel and a traffic channel formed between said base station and said plurality of terminals in accordance with a code division multiple access (CDMA) scheme in radio channels,

wherein a terminal having a request for data transmission transmits a reservation packet onto said reservation channel at arbitrary timing,

wherein said base station generates a busy tone signal in accordance with traffic channel utilization state information which indicates a state of communications on said traffic channel to control transmission of reservation packets on said reservation channel from said plurality of terminals, and

wherein each of said plurality of terminals makes references to said busy tone signal to control transmission of a reservation packet.

19. (currently amended) A system according to claim 18, wherein said base station generates said busy tone signal in accordance with said traffic channel utilization state information and a number of reservation packets received by said base station through said reservation channel.

20. (currently amended) A base station for use in a system including a said base station, a plurality of terminals, a reservation channel and a traffic channel, wherein said reservation channel and said traffic channel being formed between said base station and said plurality of terminals in accordance with a code division multiple access (CDMA) scheme in radio channels, wherein terminals having a request for data transmission transmits a reservation packet onto said reservation channel at arbitrary timing, ~~and~~ said base station comprising:

means for generating, in accordance with traffic channel utilization state information which indicates a state of communications on said traffic channel, a busy tone signal which controls of transmission of reservation packets on said reservation channel from a plurality of terminals.

21. (currently amended) A base station according to claim 20, wherein said busy tone signal is generated in accordance with said traffic channel utilization state information and a number of reservation packets received by said base station through said reservation channel.

22. (currently amended) A terminal for use in a system including a base station, a plurality of said terminals, a reservation channel and a traffic channel, said reservation channel and said traffic channel being formed between said base station and said plurality of terminals in accordance with a code division multiple access (CDMA) scheme in radio channels, each of said terminal~~terminal~~ comprising:

means for, when having a request for data transmission, transmitting a reservation packet onto said reservation channel at arbitrary timing,

a busy tone value calculation routine which receives from a base station a busy tone signal to control reservation packet transmission; and

an upward schedule control routine which receives traffic state information from said busy tone value calculation routine to control issuance of reservation packets,

wherein said busy tone is generated at said base station in accordance with traffic channel utilization state information which indicates a state of communications on said traffic channel.

23. (currently amended) A terminal according to claim 22, wherein said busy tone signal is generated in accordance with traffic channel utilization state information and a number of reservation packets received by said base station through said reservation channel.

24. (currently amended) A communication method in a code division multiple access (CDMA) mobile communication system for performing communication between a base station and a plurality of mobile terminals, said communication method comprising the steps of:

transmitting a reservation packet from a mobile terminal having a request for data transmission onto a reservation channel assigned a spreading code common to said plurality of mobile ~~station~~ terminals;

transmitting a reply packet on a reply channel assigned a spreading code common to said plurality of mobile terminals and different from the

spreading code assigned to said reservation packet in the time slot defined on
a the traffic channel determined based on said reply channel which is
assigned a unique spreading code and specified by said reply packet; and
periodically transmitting from said base station busy tone information
indicative of traffic situation in its service area through said reply channel or
through a channel dedicated to the busy tone information,

wherein each mobile terminal having a request for data transmission
controls the transmission of a reservation packet based on said busy tone
information.

25. (currently amended) A communication method according to
claim 24, wherein said base station estimates, based on a number of
reservation packets received during a previous constant period, a number of
reservation packets to be generated in a next constant period, and generates
said busy tone information based on the said-estimated value and a number
of packets scheduled to be transmitted during the next constant period.

26. (currently amended) A mobile communication system
comprising:

- a base station; and
- a plurality of mobile terminals,

wherein radio channels between said base station and said mobile
terminals include a traffic channel used for transmitting data packets between
said base station and said mobile terminals, a reservation channel used for
transmitting reservation packets from a mobile terminal to said base station,

and a reply channel used for transmitting reply packets from said base station to a mobile terminal, each of said reservation, reply and traffic channels being assigned a unique spreading code, each spreading code to said reservation and reply channels is common to a plurality of mobile terminals stations in accordance with a code division multiple access (CDMA) scheme, and time slots are defined on said traffic channel,

wherein said each mobile terminal transmits a reservation packet onto said reservation channel when a request for data transmission is issued, and performs data packet communication in a time slot determined based on a reply packet transmitted from said base station through said reply channel,

wherein said base station separates a plurality of reservation packet signals having partially overlapped portions on a time axis, received through said reservation channel, into reservation packets and performing a receiving process on said reservation packets, and transmits a reply packet through said reply channel, to each mobile terminal which is a source of each received reservation packet, and

wherein said each mobile terminal controls the transmission of a reservation packet based on said-busy tone information which indicates a state of communications on said traffic channel.

27. (currently amended) A mobile communication system according to claim 26, wherein said base station estimates, based on a number of reservation packets received during a previous constant time period, a number of reservation packets to be generated during the next constant time period, and

wherein said busy tone information is generated based on said ~~the~~ estimated value and a number of packets scheduled to be transmitted during the next constant time period.